

What is claimed is:

- determining a pointer that is associated with the first address and locates a subsequent address associated with a subsequent hardware resource.

- means for determining a pointer that is associated with the first address and locates a subsequent address associated with a subsequent hardware resource.

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- a) receiving a first list of addresses associated with the at least one hardware resource, the first list of addresses listing active operation information for the at least one hardware resource;
- b) receiving a second list of addresses associated with the at least one hardware resource, the second list of addresses listing backup operation information for the at least one hardware resource;
- c) receiving a request to modify an operation of the at least one hardware resource in a given category;
- d) modifying the second list of addresses to reflect the request to modify the operation of the at least one hardware resource;
- e) exchanging the active/backup status of the first list of addresses and the second list of addresses;
- f) duplicating the active second address list as replacement for the backup first list of addresses; and
- g) operating the at least one hardware resource according to the modified active-status second list of addresses.

4. An apparatus for dynamically implementing changes for scheduling at least one hardware resource in an electronic device having a controller and memory, the apparatus comprising:

means for receiving a first list of addresses associated with the at least one hardware resource, the first list of addresses listing active operation information for the at least one hardware resource;

means for receiving a second list of addresses associated with the at least one hardware resource, the second list of addresses listing backup operation information for the at least one hardware resource;

means for receiving a request to modify an operation of the at least one hardware resource in a given category;

means for modifying the second list of addresses to reflect the request to modify the operation of the at least one hardware resource;





12. The apparatus of claim 11, wherein if the current hardware resource is reused within a system cycle, further comprising:

e) means for saving the current hardware resource information from a current use.

13. The apparatus of claim 11, wherein if the current hardware resource is not reused within a system cycle, further comprising:

e) means for determining whether operation should be terminated.

14. The apparatus of claim 10, wherein the hardware resource is at least one of a searcher element, a downlink transmitter element, matched filter element, or tracker element.

15. In a communication device having a processor, a memory, and hardware resources all coupled to each other, a method of generating a scheduler for managing the hardware resources of the communication device, the method comprising the steps of:

a) receiving a quantity of available hardware resources;

b) generating a list in the memory for linking requests to the hardware resources;

c) receiving a desired quantity of hardware resources to be operated in the communication device;

d) receiving hardware resources operation information;

e) receiving a request to use at least one of the hardware resources;

f) assigning a memory address to the hardware resource operation information for each of the hardware resources; and

g) linking the memory addresses of hardware resources.

16. The method of claim 15, wherein the list is a table listing all virtual resources available for a given function.

17. The method of claim 15, wherein the list includes a primary table and a secondary table, the primary table tracking a group allocation and the secondary table mapping virtual uses.

18. An apparatus for generating a scheduler for managing the hardware resources of the communication device having a controller and memory, the apparatus comprising:

a) means for receiving a quantity of available hardware resources;

b) means for generating a list in the memory for linking requests to the hardware resources;

c) means for receiving a desired quantity of hardware resources to be operated in the communication device;

d) means for receiving hardware resources operation information;

e) receiving a request to use at least one of the hardware resources;

f) means for assigning a memory address to the hardware resource operation information for each of the hardware resources; and

g) means for linking the memory addresses of hardware resources.

19. The apparatus of claim 18, wherein the list is a table listing all virtual resources available for a given function.

20. The method of claim 18, wherein the list includes a primary table and a secondary table, the primary table tracking a group allocation and the secondary table mapping virtual uses.